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Docket No. F-8417

Ser. No. 10/511,236

**AMENDMENTS TO THE CLAIMS:**

Please replace the claims with the claims provided in the listing below wherein status, amendments, additions and cancellations are indicated.

1. (Currently Amended) A conversation control computer which is configured to retrieve ~~retrieves~~, based on input information received from a user, a reply sentence to the input information, the conversation control computer comprising:

a morpheme extracting unit configured to extract, based on a character string corresponding to the input information, at least one morpheme constituting a minimum unit of the character string, as first morpheme information;

a conversation database configured to store pieces of second morpheme information each including a morpheme including a character, a string of characters or a combination thereof, and a plurality of reply sentences, which are associated with the pieces of second morpheme information;

a topic search unit configured to compare, based on the first morpheme information extracted at the morpheme extracting unit, the first morpheme information with the pieces of second morpheme information, and to search a piece of second morpheme information including a portion of the first morpheme information from among the pieces of second morpheme information; [[and]]

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a reply retrieval unit configured to retrieve, based on the piece of second morpheme information searched at the topic search unit, a reply sentence associated with the searched piece of second morpheme information ;

a topic identification information search unit configured to compare, based on the first morpheme information extracted at the morpheme extracting unit, the first morpheme information with pieces of topic identification information for identifying a topic, and to search a piece of topic identification information corresponding to the at least one morpheme constituting the first morpheme information from among the pieces of topic identification information, wherein

the pieces of topic identification information are each associated with pieces of second morpheme information;

the topic search unit is configured to compare, based on the searched piece of topic identification information, pieces of second morpheme information associated with the searched piece of topic identification information with the first morpheme information extracted at the morpheme extracting unit, and to search a piece of second morpheme information corresponding to the first morpheme information from among the pieces of second morpheme information associated with the searched piece of topic identification information; and

an elliptical sentence supplementation unit configured to add the searched piece of topic identification information to the first morpheme information extracted at the morpheme extracting unit to provide a supplemented first morpheme

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information when no piece of second morpheme information including a portion of the extracted first morpheme information can be located by the search performed at the topic search unit, wherein,

the topic search unit is configured to search, based on the supplemented first morpheme information, a piece of second morpheme information including a portion of the supplemented first morpheme information from among the pieces of second morpheme information .

2. (Currently Amended) The conversation control computer as set forth in claim 1, further comprising :

an input type determining unit configured to determine, based on the character string corresponding to the input information, a type of input, wherein the reply sentences are each associated with types of responses; and

the reply retrieval unit is configured to compare, based on the piece of second morpheme information searched at the topic search unit, types of responses associated with the piece of second morpheme information searched at the topic search unit with the determined type of input, to search a type of response corresponding to the type of input from among the types of responses, and to retrieve a reply sentence associated with the retrieved type of response.

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3. (Cancelled)

4. (Cancelled)

5. (Currently Amended) The conversation control computer as set forth in claim 1, further comprising:

a ranking unit configured to perform a ranking according to a frequency of search of a piece of second morpheme information at the topic search unit, wherein

the reply sentences are each associated with priority levels;

and

the reply retrieval unit is configured to compare the priority levels associated with the reply sentences with the rank determined at the ranking unit, to identify a priority level corresponding to the determined rank from among the priority levels, and to retrieve a reply sentence associated with the identified priority level.

6. (Currently Amended) The conversation control computer as set forth in claim 1, further comprising:

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a ranking unit configured to perform a ranking according to a frequency of search of a piece of second morpheme information at the topic search unit, wherein

the reply sentences are each associated with priority levels;

and

the reply retrieval unit is configured to compare the priority levels associated with the reply sentences with the rank determined at the ranking unit, to identify a priority level corresponding to the determined rank from among the priority levels, and to retrieve a reply sentence associated with the identified priority level; and

the reply retrieval unit is configured to not retrieve the reply sentence when the rank determined at the ranking unit is the lowest.

7. (Currently Amended) The conversation control computer as set forth in claim [[3]] 1, wherein:

the pieces of topic identification information are associated with one another in predetermined relationships as superordinate concepts or subordinate concepts; and

the topic identification information search unit is configured to compare, based on the first morpheme information extracted at the morpheme extracting unit, the extracted first morpheme information with related superordinate pieces of topic

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identification information, said related superordinate pieces of topic identification information being related to the searched piece of topic identification information as superordinate concepts, and to further search a piece of topic identification information corresponding to the morpheme constituting the first morpheme information from among the related superordinate pieces of topic identification information.

8. (Currently Amended) The conversation control computer as set forth in claim [[3]] 1, wherein :

the pieces of topic identification information are associated with one another in predetermined relationships as superordinate concepts or subordinate concepts; and

the topic identification information search unit is configured to search another piece of topic identification information, said another piece of topic identification information being associated with a piece of topic identification information which is a superordinate concept to the searched piece of topic identification information.

9. (Currently Amended) A computer-readable storage medium encoded with a program for executing a conversation control method for retrieving, based on input information received from a user, a reply sentence to the input information, the conversation control method comprising:

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a first step of extracting, based on a character string corresponding to the input information, at least one morpheme constituting a minimum unit of the character string, as first morpheme information;

a second step of comparing, based on the first morpheme information extracted in the first step, the first morpheme information with stored pieces of second morpheme information, and searching a piece of second morpheme information including a portion of the first morpheme information from among the pieces of second morpheme information; [[and]]

a third step of retrieving, based on the piece of second morpheme information searched in the second step, a reply sentence associated with the searched piece of second morpheme information;

a fourth step of comparing, based on the first morpheme information extracted in the first step, the first morpheme information with pieces of topic identification information for identifying a topic, and searching a piece of topic identification information corresponding to the at least one morpheme constituting the first morpheme information from among the pieces of topic identification information, wherein:

the pieces of topic identification information are each associated with pieces of second morpheme information;

the pieces of second morpheme information are each associated with reply sentences; and

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in the second step, based on the searched piece of topic identification information, pieces of second morpheme information associated with the searched piece of topic identification information are compared with the first morpheme information extracted in the first step and a piece of second morpheme information corresponding to the first morpheme information is searched from among the pieces of second morpheme information associated with the searched piece of topic identification information; and

a fifth step supplementing elliptical sentences by adding a piece of topic identification information previously searched in the fourth step to the extracted first morpheme information to obtain modified first morpheme information when no piece of second morpheme information including a portion of the extracted first morpheme information can be located by the search in the second step, wherein:

in the second step, based on the modified first morpheme information, a piece of second morpheme information including a portion of the modified first morpheme information is searched from among the pieces of second morpheme information .

10. (Currently Amended) The computer-readable medium as set forth in claim 9, the conversation control method further comprising a fourth another step of determining, based on the character string corresponding to the input information, a type of input, wherein :



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the pieces of second morpheme information are each associated with a plurality of reply sentences;

the reply sentences are each associated with types of responses; and

in the third step, based on the piece of second morpheme information searched in the second step, the types of responses associated with the piece of second morpheme information searched in the second step are compared with the determined type of input;

a type of response corresponding to the determined type of input is searched from among the types of responses; and

a reply sentence associated with a searched type of response is retrieved.

11. (Cancelled)

12. (Cancelled)

13. (Previously Presented) The computer-readable medium as set forth in claim 9, the conversation control method further comprising:

a step of performing ranking according to a frequency of search of the piece of second morpheme information in the second step, wherein

the pieces of second morpheme information are each associated with a plurality of reply sentences;

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the reply sentences are each associated with priority levels; and

in the third step, based on the piece of second morpheme information searched in the second step, the priority levels associated with the reply sentences are compared with a rank determined in the step of performing ranking, a priority level corresponding to the rank is identified from among the priority levels, and a reply sentence associated with the identified priority level is retrieved.

14. (Currently Amended) The computer-readable medium as set forth in claim 9, the conversation control method further comprising:

a step of performing ranking according to a frequency of search of the piece of second morpheme information in the second step, wherein:

the pieces of second morpheme information are each associated with a plurality of reply sentences;

the reply sentences are each associated with priority levels;

in the third step, based on the piece of second morpheme information searched in the second step, the priority levels associated with the reply sentences are compared with a rank determined in the step of performing ranking, a priority level corresponding to the rank is identified from among the priority levels, and a reply sentence associated with the identified priority level is retrieved; and when the

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rank determined in the step of performing ranking is the lowest, a  
reply sentence is not retrieved.

15. (Currently Amended) The computer-readable medium as set forth in  
claim 9, wherein in the conversation control method:

the pieces of topic identification information are associated with one another  
in predetermined relationships as superordinate concepts or subordinate concepts;  
and

in the ~~another~~ fourth step of comparing, based on the first morpheme  
information extracted in the first step, the extracted first morpheme information is  
compared with related superordinate pieces of topic identification information, said  
related superordinate pieces of topic identification information being related to the  
searched piece of topic identification information as superordinate concepts, and a  
piece of topic identification information corresponding to the at least one morpheme  
constituting the first morpheme information is searched from among the related  
superordinate pieces of topic identification information.

16. (Currently Amended) The computer-readable medium as set forth in  
claim ~~[[11]]~~ 9, wherein in the conversation control method:

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the pieces of topic identification information are associated with one another in predetermined relationships as superordinate concepts or subordinate concepts; and

in the ~~another~~ fourth step of comparing, when a piece of topic identification information corresponding to the at least one morpheme constituting the first morpheme information is searched, another piece of topic identification information related to a piece of topic identification information which is a superordinate concept to the searched piece of topic identification information is searched.

17. (Previously Presented) The conversation control computer as set forth in claim 2, wherein said type of input includes affirmation or negation.

18. (Previously Presented) The computer-readable medium as set forth in claim 10, wherein in the conversation control method said type of input includes affirmation or negation.